

Perfect Codes for Uniform Chains Poset Metrics

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Abstract—The class of poset metrics is very large and contains some interesting families of metrics. A family of metrics, based on posets which are formed from disjoint chains which have the same size, is examined. A necessary and sufficient condition, for the existence of perfect single-error-correcting codes for such poset metrics, is proved.

Index Terms—Disjoint uniform chains, perfect codes, poset codes.

I. INTRODUCTION

To be posted

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